



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/775,209

02/11/2004

Yoshiaki Hori

0505-1269P

9980

2292 7590 01/23/2009
BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

TRAN, DIEM T

ART UNIT

PAPER NUMBER

3748

NOTIFICATION DATE

DELIVERY MODE

01/23/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No. 10/775,209	Applicant(s) HORI ET AL.	
	Examiner DIEM TRAN	Art Unit 3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-10,14-16,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-10,14-16,19,20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the Request for Continued Examination (RCE) filed on 10/27/08. In the amendment, claims 1, 6, 7, 9, 14, 15 have been amended and claims 3-5, 11-13, 17-18 have been canceled. Overall, claims 1, 2, 6-10, 14-16, 19, 20 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2, 6-10, 14-16, 19, 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claims 1, 9 of the amendment filed on 10/27/08, the applicants added the claimed limitation “**said cylinder block and said cylinder head are inclined toward a left side of the crankshaft**” are considered new matter since the originally filed disclosure does not contain any support for the invention as now claimed.

The amendment filed 10/27/08 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure. Applicant is required to cancel the new matter in the reply to this Office

Art Unit: 3748

Action.

In order to expedite the prosecution process of this present application, the examiner assumes that applicants will correct and delete the new matter issues. The examiner will examine the previously presented subject matters accordingly in this Office Action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-9, 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikenoya et al. (US patent 4,437,305) in view of Hori et al. (US Patent 6,311,483).

Regarding claims 1, 9, Ikenoya discloses an exhaust gas purifying device for a four-cycle engine having a secondary air supply passage (8) for supplying secondary air to an exhaust port and a valve for opening and closing the secondary air supply passage with exhaust pulsations, comprising a longitudinal axis of said exhaust port is parallel to said longitudinal axis of camshaft in a plan view of the engine, wherein said exhaust port is formed with a cylinder head, said camshaft is disposed on a side of said exhaust port and supported by said cylinder head (see Figures 1, 2), said valve (L) is disposed on a front side of the engine which is perpendicular to said camshaft (not numbered but clearly shown in Figure 2), wherein the secondary air supply passage includes a substantially vertical hole and a horizontal hole disposed in a cylinder block are in communication with each other and with the exhaust port (see Figure 2); however, fails to

Art Unit: 3748

disclose that said valve is disposed on a left or right side of the engine and the substantially vertical hole and horizontal hole are disposed in a cylinder head for communicating with the exhaust port. Hori teaches that a secondary air supply passage (110) includes a substantially vertical hole (112) and a substantially horizontal hole (111) disposed in a cylinder head for communicating with the exhaust port (see Figure 10).

It would have been obvious to one having ordinary skill in the art, to have utilized the teaching of Hori in the device of Ikenoya, since the use thereof would have been conventional in the art.

Even though Ikenoya discloses that the valve is disposed on the front side of engine but the valve is free from interference with a camshaft actuating device (see Figure 2). It would have been obvious for one having ordinary skill in the art to put secondary air valve on a left side of the cylinder head, since the use thereof would have been a matter of design choice which would have also provided a compact engine for use in a motorcycle.

Ikenoya further discloses that said cylinder head (2) is mounted on said cylinder block (1) and said substantially vertical hole and the substantially horizontal hole disposed in the cylinder block and the cylinder head are in communication with each other and with the exhaust port (see Figure 2).

Regarding claims 6, 14, Ikenoya further discloses that a secondary air supply conduit operatively connected to an air cleaner (8) and said substantially vertical hole and the substantially horizontal hole disposed in the cylinder block and the cylinder head for communicating air to the exhaust port (see Figure 2).

Regarding claims 7, 15, Ikenoya further discloses that said valve is a reed valve (L) operatively positioned relative to the substantially vertical hole and a substantially horizontal hole disposed in the cylinder block and the cylinder head for selectively permitting communication between the secondary air supply conduit and the exhaust port (6) (see Figure 2).

Regarding claim 8, Ikenoya further discloses that said reed valve (L) is disposed relative to the substantially horizontal hole disposed in the cylinder block (see Figure 2).

Regarding claim 16, Ikenoya further discloses that said reed valve (L) is disposed relative to the substantially horizontal hole disposed in the cylinder block (1) (see Figure 2).

Claims 2, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikenoya et al. (US patent 4,437,305) and Hori et al. as applied to claims 1, 9 above, and further in view of design choice.

The modified Ikenoya device discloses all the claimed limitations as discussed in claims 1, 9 above, however, fails to disclose that a pipe for supplying the secondary air extends substantially horizontally from the valve to an air cleaner. With regard to the limitation directed to the horizontal arrangement of the secondary air pipe, it is the examiners position that the such would have been an obvious matter of design choice well within the level of ordinary skill in the art depending on design variables such as spacing availability in the surrounding area of the valve etc.. Moreover, there is nothing in the record which establishes that the claimed ranges present a novel or unexpected result (see In re Kuhle, 526 F.2d 553, 188 USPQ 7(CCPA 1975)).

Claims 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikenoya et al. (US patent 4,437,305) and Hori et al. as applied to claims 1, 9 above, and further in view of Brubaker (US Patent 2,069,749).

Regarding claims 19, 20, the modified Ikenoya device discloses all the claimed limitations as discussed in claims 1, 9 above, however, fails to disclose that a thermostat housing is disposed on the front surface of the cylinder head. Brubaker teaches that a thermostat (4) is disposed on the front surface of the cylinder head (3)(see Figure 1).

It would have been obvious to one having ordinary skill in the art, to have utilized the teaching of Brubaker in the modified device of Ikenoya, since the use thereof would have provided an effective means to control the flow of coolant to the cylinder head and cylinder block.

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (571) 272-4866. The examiner can normally be reached on Monday -Friday from 8:00 a.m.- 6:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about

Art Unit: 3748

the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 800-786-9199 (toll-free).

/Diem Tran/
Patent Examiner

/Thomas E. Denion/
Supervisory Patent Examiner, Art Unit 3748